

# **THERMOGUARD UNIVERSAL**

## **EXTENDED LIFE ANTIFREEZE/COOLANT**

ThermoGuard Universal Extended Life Antifreeze/Coolant incorporates cutting-edge inhibitor technology. It utilizes a hybrid organic acid technology (HOAT) additive/inhibitor package and contains no phosphates, borates, nitrates, or silicates. ThermoGuard Universal Extended Life Antifreeze/Coolant incorporates multiple complex carboxylic acid derivatives along with nitrite to protect all six standard metal alloys (brass, copper, steel, solder, cast iron, and aluminum). These low foaming carboxylates not only provide broad-range metal protection but also guard the cooling system against corrosion and cavitation-erosion. In addition it contains additive to minimize hot surface scaling while also preventing heat transfer surface fouling due to minor oil leakage.

- *This new formula can be used to top off any color antifreeze including green, orange, pink, blue, or red.*
- *Amber color will not change the current antifreeze color when topping off.*
- *One of the only Universal extended life antifreeze products that can be used in both gasoline and diesel engines.*

### **PERFORMANCE SPECIFICATIONS**

ASTM 3306	CUMMINS 3666132	NISSAN
ASTM 4985	DETROIT 75E298	AUDI
NAVISTAR B1 (B6-00860)	VOLVO	MERCEDES
ASTM D4656	TMC RP-329	BMW
ASTM D5345	JOHN DEERE H-5	
ASTM D6210	JOHN DEERE 8650-5	
FORD WSS-M97B51A-1	MACK 014G517004	
FORD ESE- M97B18-C	ATA RP 302A	
FORD ESE-M97B44-A	FORD NEW HOLLAND 9-86	
CHRYSLER MS-7170	GM 6043M	
CHRYSLER MS-9769	GM 6277M	
CATERPILLAR EC-1	GM 1825M	
CUMMINS 90T8-4	GM1899M	
FREIGHTLINER 48-22880	SAE J814C	
WHITE (GMC DIV. OF VOLVO)	SAE J1034	
CASE CORP. MS 1710	SAE J1038	
WAUKESHA 4-19470	SAE J1941	

### **PRODUCT SPECIFICATIONS**

	<u>Concentrate</u>	<u>50/50</u>
Glycols Content, Mass %	96	48
Specific Gravity (60/60°F)	1.110 – 1.145	1.07-1.110
Freezing point, 50 Vol.% F	-34 Max.	-34 Max.
Boiling Point, *F	325 Min.	226 Min.
Effect on Automotive Finish	No Effect	No Effect
pH. 1:2 dil. w/water	9.5 – 10.6	9.5 – 10.6
Chloride, ppm	< 5 PPM	< 5 PPM
Reserve Alkalinity	3.0 ml min.	3.0 ml min
Nitrite (ppm)	2400 ppm	1200 ppm
Ash (WT.%)	5 Max.	2.5 MAX
Bittering Agent	Yes	Yes

### **PACKAGING OPTIONS**

#### **THERMOGUARD UNIVERSAL EXTENDED LIFE ANTIFREEZE 50/50 Pre-diluted AND 100% Concentrate**

#### **Product Color: Yellow/Gold**

##### 1 Gallon

Pack/Unit per Case: 6

Cases per Pallet: 36

Pallets per Truck: 20

Gallons per Truck: 4320

Total Pallet Weight: 2210 lbs

##### 55 Gallon Drums

Drums per Pallet: 4

Pallets per Truck: 20

Drums per Truck: 80

Gallons per Truck: 4400

Drum Weight: 550 lbs

##### Bulk

Gallons per Full Truck Load: 5500

\*Partial truck loads can be purchased